Customer No.: 31561
Docket No.: 12971-US-PA
Application No.: 10/709,850

REMARKS

Present Status of the Application

claims 1-10 are still pending of which claim 1 has been amended in order to more clarify the claimed subject matter without the introduction of any new matter to the claims. However, applicant respectfully traverses the Examiner's rejection based on the following arguments and re-consideration of withdrawing this rejection is highly respectfully requested.

Discussion for amendments to claim 1:

The added limitations of claim 1 are recited as follows:

a first substrate having a first electrode layer and an organic functional layer sequentially directly disposed thereon, wherein the first electrode layer is directly disposed on the first substrate (referred to a first limitation);

a second substrate having a second electrode layer directly (referred to a second limitation) disposed thereon; and wherein the organic functional layer comprises an electron transporting layer (referred to a third limitation).

The first limitation of "a first substrate having a first electrode layer and an organic functional layer sequentially directly disposed thereon, wherein the first electrode layer is directly disposed on the first substrate" is disclosed in preceding amended paragraph [0031].

The second limitation is disclosed in paragraph [0035] 1st sentence and Fig.1B. The third limitation is disclosed in paragraph [0034] line 2-5, i.e. "organic functional layer 106 is a composite stack on top of the first electrode layer

comprising, from bottom to top, a hole injecting layer (HIL) 112, a hole transporting layer (HTL) 114, a emission layer (EL) 116, an electron transporting layer (ETL) 118 and an electron injecting layer (EIL) 120." **Accordingly, the amended claim 1 does not introduce any new matter.**

Discussion for rejection to claims under 35 U.S.C.102 (b)

Claims 1 and 3 are rejected under 35 U.S.C.102 (b) as being anticipated by Liedenaum (WO 02/093537A2).

In response thereto, applicant respectfully traverses the preceding rejection based on the following arguments. To establish a prima facie case of anticipation, the cited reference (i.e. Liedenaum) should teach, suggest or disclose all limitations of claim 1. From Fig.2, in Liedenaum, there discloses a first substrate (1) and a first electrode layer 5 are interposed an electrically and chemically insulating protective layer (11) (see 1st paragraph in page 7). Likewise, a second substrate (2) and a second electrode layer 6 are interposed an electrically and chemically insulating protective layer (12). In other words, in Liedenaum, the first substrate (1) is so defined as a stacked layer structure of first substrate (1)-protective layer (11)-electrode (5), which is totally different from "a first substrate having a first electrode layer and an organic functional layer sequentially **directly** disposed thereon, **wherein the first electrode layer is directly disposed on the first substrate,**" as claimed in amended claim 1. That is, the first electrode layer is not disposed <u>on</u> (emphasis added) the first substrate as claimed in amended claim 1 because these two layers are separated by the

protective layer, and so does the second electrode layer. Accordingly, Liedenaum fails to teach, suggest or disclose" a first substrate having a first electrode layer and an organic functional layer sequentially **directly** disposed thereon, **wherein the first electrode layer is directly disposed on the first substrate**; and a second substrate having a second electrode layer **directly disposed thereon,**" as claimed in amended claim 1. That is, the amended claim 1 is not anticipated by Liedenaum and thus patentable.

As to dependent claim 3, it should be patentable as a matter of law for the reason it contains all limitations of its patentable base claim 1.

Claims 1 and 4 are rejected under 35 U.S.C.102 (b) as being anticipated by Fukunaga (U. S. 6,559,594).

In response thereto, applicant respectfully traverses the preceding rejection based on the following arguments. To establish a prima facie case of anticipation, the cited reference (i.e. Fukunaga) should teach, suggest or disclose all limitations of claim 1. From Fig. 4D and col. 8, lines 57-60, in Fukunaga, the first substrate (335) and the first electrode layer (333) are interposed a passivation film (337) made of a tantalum oxide film or diamond like carbon film, and a spacer (336). Thus, in Fukunaga, the first electrode layer (333) and organic function layer 331 are not directly disposed on the substrate. Likewise, from Fig.3E, a second electrode layer 321 is separated from the second substrate 301 by insulating layer 302. Therefore, Fukunaga fails to teach, suggest or disclose" a first substrate having a first electrode layer and an organic functional layer sequentially **directly** disposed thereon, **wherein the first electrode layer is directly disposed on the first substrate**; and a second substrate

having a second electrode layer **directly disposed thereon"** as claimed in amended claim 1.

Furthermore, in page 7, line 3-7, in "response to argument," the Examiner alleged that limitation "a conductive layer disposed between the organic functional layer and the second electrode layer," as claimed in claim 1 is met by the structure of the device disclosed in Fukunaga since an electrode is defined as a conductor through which electricity enters or leaves something. However the Examiner's allegation is incorrect **because** in Fukunaga, **the electrode (321) is not directly disposed on second substrate (301) and thus not identical to claimed second electrode layer**. Therefore, Fukunaga fails to teach, suggest or disclose" a conductive layer disposed between the organic functional layer and **the second electrode layer**," as claimed in claim 1. Thus, since a prima facie case of anticipation is not well established, the amended claim 1 is not anticipated by Fukunaga and thus patentable.

As to dependent claim 4, it should be patentable as a matter of law for the reason it contains all limitations of its patentable base claim 1.

Claims 1-2 and 5-10 are rejected under 35 U.S.C.102 (e) as being anticipated by Lu (U. S. 2004/0245917).

In response thereto, applicant respectfully traverses the preceding rejection based on the following arguments. Likewise, to establish a prima facie case of anticipation, the cited reference (i.e. Lu) should teach, suggest or disclose all limitations of claim 1. From Fig.1 and paragraph [0062], in Lu, the reference numeral 80 is not a conductive layer as alleged, but an organic electro-transport layer. Further referring to

paragraph [0034] in the specification, the electro-transport layer is comprised in claimed organic functional layer. Accordingly, actually, Lu fails to disclose claimed conductive layer because the second electrode layer 90 is directly disposed on the electron transporting layer (80) that is comprised in the organic functional layer, as claimed in amended claim 1. Thus, Lu fails to teach, suggest or disclose "**a conductive layer** disposed between the organic functional layer and the second electrode layer, wherein the second electrode layer is electrically connected to the organic functional layer through the conductive layer, wherein the organic functional layer comprises an electron transporting layer," as claimed in amended claim 1. Namely, amended claim 1 is not anticipated by Lu and thus patentable.

As to dependent claims 2 and 5-10, they should be patentable as a matter of law for the reason they contains all limitations of their patentable base claim 1.

In response to "response to argument," as stated in this OFFICE ACTION:

The Examiner rejection claim 1 due to its improper claim language. For example, claim language in claim 1, "a first substrate having a first electrode layer and an organic functional layer sequentially disposed thereon," does not require that first electrode layer and the organic functional layer be directly on the substrate, only that they are on the substrate in the claimed sequence. To preventing the examiner from misunderstanding the features of claim 1, the claim 1 is so amended to more clarify subject matter without introducing any new matter.

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CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-10 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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